

## Patent Claims

What is claimed is

1. Arrangement for coupling at least one beam of optical tweezers for trapping particles and/or a treatment beam into a microscope beam path, preferably in a laser scanning microscope, wherein means are provided for changing the position of the beam focus of the optical tweezers and/or of the treatment beam in a freely adjustable manner for purposes of changing the focal position of the microscope.
2. Arrangement according to claim 1, wherein separate movable optics are provided for changing the position of the beam focus.
3. Arrangement according to one of the preceding claims, wherein the beam outlet and/or illumination optics of the optical tweezers and/or of the treatment beam are/is displaceable in the direction of the optical axis.
4. Arrangement according to one of the preceding claims, wherein the change is controllable and causes a movement of the optical tweezers and/or of the treatment beam in the direction opposite to the movement of the microscope objective.
5. Arrangement according to one of the preceding claims, with a defined control of the displacement by means of previously stored or calculated values depending on the focal position.
6. Arrangement according to one of the preceding claims, wherein there is provided a plurality of optical tweezers and/or treatment beams which are adjustable individually and/or jointly with respect to their focal position.

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